

MILFORD WASTEWATER TREATMENT FACILITY c/o Town Hall • 1 Union Square Milford, NH 03055

Wastewater Treatment Facility ~ 2005 REPORT ~

Milford Wastewater Facility began operations in 1982. The facility is a Grade IV (the highest level in NH) and utilizes a secondary wastewater treatment that incorporates the conventional activated sludge process. The facility is designed and permitted to treat 2,150,000 gallons of wastewater per day (2.15 MGD) within parameters set by the Environmental Protection Agency. More than 2,600 customers are served within the Towns of Milford and Wilton. During 2005, Wilton contributed approximately 11 % of the 13.5% flow they are allowed to discharge to the facility. The Wastewater Facility also treats septage that is pumped from home septic systems, outside the municipal sewer system, and hauled to the wastewater facility. This year, over 1.2 million gallons of septage was treated. A total of 544.23 million gallons of wastewater was treated and discharged into the Souhegan River.

Both the Environmental Protection Agency (EPA) and New Hampshire Department of Environmental Services (NHDES) regulate the operations of the treatment facility. Every five years a discharge permit is issued. Within each permit are the guidelines, or limitations, by which we must maintain the treatment process. In addition to the discharge permit, the EPA issued an Administrative Order that requires the monitoring and reporting of copper within the effluent. This Order required formulating a detailed Copper Optimization Engineering Report during 2005 and is currently under review by the EPA and NHDES.

The NHDES requires each wastewater treatment facilities in the State to be staffed with operators that are State-certified. Certification by oral and written examinations ensures facilities are maintained and operated by suitably qualified personnel with proven levels of knowledge. Wastewater treatment operators must operate a variety of mechanical equipment in order to remove harmful waste products from water and to render that water environmentally acceptable before returning it to the environment. Operators are required to maintain pumps, piping, valves, and processing equipment to move wastewater through collection system piping and various treatment processes. They must read and interpret meters and gauges, operate chemical-feed devices, perform laboratory analyses, operate computer programs and document results of their work. Wastewater operators must be "Jacks of all trades" that are familiar with a range of electrical & mechanical devices, chemistry, microbiology, hydraulics, and a host of other disciplines.

The Town of Milford is fortunate to recruit and retain a diverse team of people whose broad range of work experience compliments each other's strengths. Cross training is routinely emphasized at the Wastewater Treatment Facility, thereby maximizing the efficiency and effectiveness of a united team of trained operators available on short notice needs within water, wastewater and collection system disciplines. Our operators attend State-sponsored training courses and trade shows

annually to earn continuing education training credits, necessary to maintain their State certification status.

Certification levels for employees at the Milford Wastewater Treatment Facility are:

| | | Wastewater | Drinking Water | | Collection System | Laboratory Analyst |
|----------|------------------|---------------|----------------|--------------|----------------------|-----------------------|
| Employee | | Certification | Treatment | Distribution | Certification | Certification |
| Since | | Level | Level | Level | Level | Level |
| | | | | | | |
| 07/09/84 | Larry Anderson | IV | II | II | III | |
| 07/05/95 | Dave Boucher | IV | II | II | Ш | ll l |
| 03/22/99 | Carl Couture | III | II | II | 1 | I |
| 03/23/98 | Jim Dargie | II | II | II | II | |
| 08/7/95 | Ed Denell | | | I | | |
| 01/17/05 | Terry Morrison | I OIT | | | | |
| 01/01/04 | Paul Perky | | | I | I | |
| 09/08/99 | Susan Snyder | II | | | | I |
| 11/07/05 | Al St. Pierre | II OIT | | | | |
| 11/01/72 | Alfred Vigneault | | | I | | |
| 09/05/89 | Brad Whitfield | | I | II | III | |
| 10/11/04 | Jim Young | | | | | |

Wastewater Collection System

The Collection System crew cleaned and inspected 64.000 linear feet of sewer main in the west section of Milford. and inspected approximately 400 manhole structures for needed maintenance. All manholes on Mooreland Street were rehabilitated. Ongoing maintenance such as brush cutting and mowing within sewer easements was also accomplished.

There are approximately 2,600 sewer service connections on the collection system. The crew



responded to two sewer service back-ups this year, neither of which required any work within the Town Right of Way. During 2005, 35 residential and 5 commercial sewer permits were issued. New developments accounted for an approximate increase of 3,100 linear feet of sewer main to the collection system.

Operations continue to remove ground water infiltration within the Town's collection system. Every gallon of "clean" ground water entering the wastewater facility must complete the treatment process, which costs money unnecessarily and decreases

the amount of permitted facility flow capacity. To reduce unnecessary costs, a prioritized list of sewer main and sewer structures requiring repair and/or replacement has been established. To minimize the disruption to residents, all sewer repairs, water main replacements, road resurfacing, etc., will be coordinated with Public Works and Water Department schedules.

<u>SEWER MAIN REPLACEMENT</u> – In 2005 the Collection System personnel were heavily relied upon to assist with critical needs in other aspects of the Public Works Department, as deemed necessary, and as such we were unable to accomplish any significant sewer main replacements. Thank you to all of the employees who went above and beyond their normal duties to assist other teams for the greater good.

Residents are encouraged to periodically inspect and maintain their sanitary sewer system components so that the financial and hydraulic impact on the Treatment Facility is minimized. Each toilet that is allowed to "run", each faucet that drips, every sump pump that is intentionally or unintentionally connected to the municipal sewer system, unnecessarily sends clean water for cleaning and processing by the Wastewater Treatment Facility, and causes citizens to have higher water and sewer bills. Your continued support of collection system efforts is appreciated.

The Treatment Facility management team continued to encourage collection system on-the-job training, safety awareness and training course attendance.

Come and see how thoroughly your environment is being maintained. The staff at the Wastewater Treatment Facility welcomes visitors and inquiries. Call 673-9441 to arrange a tour at our Nashua Street facility between 7:00 and 3:00, or check us out at www.milford.nh.gov, clicking on Town Departments, Public Works, then Wastewater. We would be glad to give you a tour.

Thank you for your continued support, Larry B. Anderson, Superintendent Water & Wastewater Departments



TOWN OF MILFORD SEWER FUND CASH BALANCES AS OF 12/31/05

(Unaudited)

CASH BALANCES AS OF 12/31/05:

UNDESIGNATED: \$ (109,827.80)
CAPITAL RESERVE 572,131.36

TOTAL: \$ 462,303.56

TOWN OF MILFORD SEWER FUND STATEMENT OF CUSTOMERS' ACCOUNTS AS OF 12/31/05

(Unaudited)

ACCOUNTS RECEIVABLE AS OF 1/1/05 \$ 117,956.35

PLUS CHARGES:

 SEWER USER FEES
 1,148,958.43

 OTHER SALES
 92,847.95

1,241,806.38

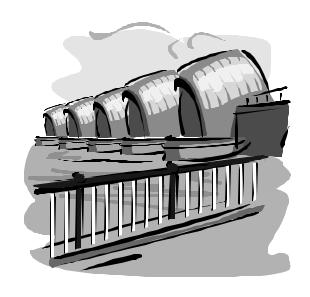
LESS:

COLLECTIONS ON RECEIVABLES (1,245,845.37)
ABATEMENTS (539.12)

(1,246,384.49)

ACCOUNTS RECEIVABLE AS 12/ 31/05 \$ 113,378.24

NOTE: THERE MAY BE PURCHASES/ENCUMBRANCES OUTSTANDING



TOWN OF MILFORD SEWER FUND

INCOME & EXPENSE STATEMENT

AS OF 12/31/05

(Unaudited)

| | BUDGET | | ACTUAL YTD | REMAINING |
|--------------------------|-------------------|-------------|------------|----------------|
| REVENUES: | _ | | _ | |
| CHARGES FOR SERVICES | \$ 1,477,000 # | <i>‡</i> \$ | 1,371,325 | \$ 105,675 |
| MISCELLANEOUS | 13,918 | | 20,942 | (7,024) |
| OTHER FINANCING SOURCES | 102,664 | | - | 102,664 |
| TOTAL REVENUES: | \$ 1,593,582 | \$ | 1,392,267 | \$ 201,315 |
| | 1 | | | |
| | BUDGET | | ACTUAL YTD | REMAINING |
| EXPENSES: | | | | |
| ADMINISTRATION | \$ 680,258 | \$ | 692,910 | \$ (12,652) |
| EMPLOYEE BENEFITS | 166,621 | | 152,417 | 14,204 |
| LABORATORY | 34,600 | | 39,829 | (5,229) |
| OPERATIONS & MAINTENANCE | 279,400 | | 310,196 | (30,796) |
| PROCESSING | 75,400 | | 76,202 | (802) |
| COLLECTION | 192,325 | | 133,439 | 58,886 |
| PRETREATMENT | 13,300 | | 8,363 | 4,937 |
| DEBT SERVICE | 151,678 | | 151,678 | - |
| TOTAL EXPENSES: | \$ 1,593,582 | \$ | 1,565,034 | \$ 28,548 |

NOTE: THERE MAY BE PURCHASES/ENCUMBRANCES OUTSTANDING